June 13, 2002

D.T.E. 02-38

Investigation by the Department of Telecommunications and Energy on its own Motion into Distributed Generation.

ORDER OPENING INVESTIGATION INTO DISTRIBUTED GENERATION

I. INTRODUCTION

The Department of Telecommunications and Energy ("Department") has recognized the importance of distributed generation[1] as a resource option in the restructured electric industry. See Competitive Market Initiatives, D.T.E. 01-54, at 11 (2001); see also, Qualifying Facilities Rulemaking, D.T.E. 99-38 (1999); Electric Industry Restructuring, D.P.U./D.T.E. 96-100, at 23 (1998). Distributed generation can meet customers' energy needs. It also has potential for load response. D.T.E. 01-54, at 11. Further, because of its ability to reduce peak load, distributed generation may relieve transmission and distribution constraints and protect against outages.

Widespread installation of distributed generation, however, may raise safety and reliability issues about distribution systems. In addition, distributed generation may affect distribution revenue streams and cause cost shifting among customers. In light of these benefits and concerns, the Department opens this inquiry into distributed generation in Massachusetts.[2]

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[1] General Laws c. 164, § 1 ("Restructuring Act" or "Act") defines distributed generation as "a generation facility or renewable energy facility connected directly to distribution facilities or to retail customer facilities which alleviate or avoid transmission or distribution constraints or the installation of new transmission facilities or distribution facilities."

[2] On May 2, 2002, the Massachusetts Renewable Energy Trust ("Trust"), administered by the Massachusetts Technology Collaborative, issued its own request for information regarding the use of distributed renewable energy generation to reduce problems associated with transmission and distribution system constraints in Massachusetts. Given consensus support for the installation of distributed renewables, the Trust may allocate "up to $10,000,000 to support the deployment of clean, distributed resources in ways that would diversity the supply of energy resources to Massachusetts ratepayers." (Request for Information at 3).

II. SCOPE OF INVESTIGATION

In D.T.E. 01-54, the Department recognized that there may be technical, economic, and regulatory barriers to distributed generation. Specifically, we noted that "[t]he lack of uniformity and uncertainty regarding interconnection standards and back-up rates could be inhibiting the installation of distributed generation in Massachusetts." D.T.E. 01-54, at 11. Accordingly, the Department has identified three issues of focus for the initial phase of this investigation: (1) the development of interconnection standards and practices that do not threaten the reliability or safety of existing distribution systems, but also do not present undue barriers to the installation of distributed generation; (2) the appropriate method for the calculation of standby or back-up rates and other charges associated with the installation of distributed generation; and (3) the appropriate role of distributed generation in distribution company resource planning. Each issue is discussed further below. Identification of these issues, however, focuses but does not limit the scope of this proceeding. The Department also seeks comment regarding what other issues may be appropriate for consideration as part of our investigation of distributed generation: for example, fuel source and storage; adequacy of natural gas pipeline supply and distribution infrastructure to support widespread reliance on distributed generation; siting; zoning; and environmental questions about both particular location (point source) and generalized reliance (area source).

A. Interconnection Standards

A significant issue facing those seeking to install distributed generation is the interconnection to the electric distribution system. Safe and reliable interconnection with the electricity grid is essential. However, unnecessarily restrictive interconnection policies and standards may act as a barrier to the use of distributed generation. Each Massachusetts electric distribution company has developed interconnection standards applicable to on-site generators and qualifying facilities under the Public Utilities Regulatory Policies Act of 1978. See D.T.E. 99-38 (1999). These technical standards and interconnection policies differ from company to company. A number of states, including California, New York, and Texas, have established state-wide interconnection standards.[3] In addition, the Institute of Electrical and Electronic Engineers ("IEEE") is currently developing universal technical interconnection standards for distributed generation.[4] As part of this proceeding, the Department will investigate the development of standards and practices that recognize legitimate safety and reliability concerns associated with interconnection, but also that do not unduly inhibit the installation of distributed generation.

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[3] See e.g., Decision Adopting Interconnection Standards, Public Utilities Commission of the State of California D.00-12-037 (2000); New York State Standardized Interconnection Requirements, Application Process, Contract and Application Forms for New Distributed Generators (2000); Public Utility Commission of Texas Distributed Generation Interconnection Manual (2002).

[4] See Standard for Distributed Resources Interconnected with Electric Power Systems, IEEE P1547.

B. Standby Rates

Another important issue affecting the installation of distributed generation is the back-up or standby rates that distribution companies may seek to charge. Customers that install on-site generation often rely on back-up or standby power provided by a distribution company. In addition to charging customers for their metered electric consumption, a distribution company may seek to recover costs related to the standby services it provides. Ideally, standby or back-up service tariffs should ensure that customers pay an appropriate share of distribution system costs. When determining these costs, it is important to provide an appropriate price signal to customers seeking to install distributed generation. Back-up rates that are too high may inappropriately discourage the development of distributed generation. However, back-up rates that are below the actual cost of providing service could shift these costs to other customers. As part of this proceeding, the Department will investigate the appropriate method for the calculation of standby or back-up rates associated with the installation of distributed generation.

C. Distribution Company Involvement in Distributed Resources

If used appropriately, distributed generation has the potential to defer or postpone costly upgrades and additions to a utility's transmission and distribution system. As part of this proceeding, the Department will investigate the appropriate role of distributed generation.

III. PUBLIC PARTICIPATION

The Department invites all interested persons to file comments on the following questions:

1. Refer to current distribution company interconnection standards and procedures in Massachusetts. Do these standards and procedures act as a barrier to the installation of distributed generation? If so, please describe.

    a. If the current standards and procedures act as barriers to the installation of distribution generation, please describe what steps the Department should take to remove these barriers. As part of this response, please discuss whether the Department should establish uniform technical interconnection standards and procedures for distributed generation.

    b. Please comment on whether the Department should adopt the IEEE's uniform technical interconnection standards, or the uniform standards adopted by other states, for use in Massachusetts.

2. Refer to current distribution company standby service tariffs. Do these tariffs act as a barrier to the installation of distributed generation? If so, please describe.

    a. Please discuss the appropriate method for the calculation of standby or back-up rates associated with the installation of distributed generation. As part of this response, please discuss whether other states have established policies regarding back-up rates associated with distributed generation that may be appropriate for adoption in Massachusetts.

3. Please discuss the role of distributed generation with respect to the provision of reliable, least-cost distribution service by the Massachusetts distribution companies.

    a. What steps should the distribution companies take in order to identify areas where the installation of distribution generation would be a lower-cost alternative to system upgrades and additions?

    b. What steps should the distribution companies take to encourage the installation of cost-effective distributed generation in their service territories?

4. What other issues are appropriate for consideration as part of the Department's

investigation of distributed generation?

The Department also welcomes comment on related issues of interest that are not specifically raised here. Initial comments should be filed by August 1, 2002. Reply comments should be filed by August 15, 2002. All comments exceeding 20 pages in length must contain an executive summary. One original and ten copies of all comments should be filed with Mary Cottrell, Secretary, Department of Telecommunications and Energy, One South Station - 2nd Floor, Boston, Massachusetts 02110. All written comments also should be submitted to the Department in electronic format.[5] A public hearing regarding distributed generation will be held at the Department's offices at 10:00 a.m. on August 21, 2002. After the public hearing, the Department will determine what further proceedings may be appropriate.

IV. ORDER

Accordingly, the Department

VOTES: To open an investigation into distributed generation; and it is

ORDERED: That within seven days of the date of this Order, the Secretary of the

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[5] Electronic submissions should be made using one of the following methods: (1) by e-mail attachment to dte.efiling@state.ma.us and or (2) on a 3.5" disk, IBM-compatible format. The text of the e-mail or the disk label must specify (1) the docket number of the proceeding (D.T.E. 02–38), (2) name of the person or company submitting the filing, and (3) a brief descriptive title of the document. The electronic filing should also include the name, title and phone number of a person to contact in the event of questions about the filing. Text responses should be written in either Word Perfect (naming the document with a ".wpd" suffix), in Microsoft Word (naming the document with a ".doc" suffix), or as an Adobe PDF file (naming the document with a ".pdf" suffix). Data or spreadsheet responses should be compatible with Microsoft Excel. All written pleadings or comments submitted in electronic format will be posted on the Department's website, http://www.mass.gov/dpu.

Department shall publish the attached notice of this investigation in a statewide newspaper of daily circulation within the Commonwealth; and it is

FURTHER ORDERED: That the Secretary of the Department shall serve a copy of this Order by mail on all persons that have asked to be placed on a general notification list pursuant to 220 C.M.R. § 2.09.

By Order of the Department,

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Paul B. Vasington, Chairman

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James Connelly, Commissioner

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W. Robert Keating, Commissioner

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Eugene J. Sullivan, Jr. Commissioner

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Deirdre K. Manning, Commissioner

June 13, 2002

D.T.E. 02-38

Investigation by the Department of Telecommunications and Energy on its own Motion into Distributed Generation.

REQUEST FOR COMMENTS

On June 13, 2002, the Department of Telecommunications and Energy ("Department") issued an Order opening a Notice of Inquiry into distributed generation. Distributed Generation NOI, D.T.E. 02-38. A copy of the Order, Distributed Generation NOI, is on file at the Department's offices, One South Station-2nd floor, Boston, Massachusetts for public view during normal business hours. The Order is also available on the Department's website - http://www.mass.gov/dpu. Pursuant to G.L. c. 164, § 76, the Department invites all interested persons to file comments on the following questions:

1. Refer to current distribution company interconnection standards and procedures in Massachusetts. Do these standards and procedures act as a barrier to the installation of distributed generation? If so, please describe.
   a. If the current standards and procedures act as barriers to the installation of distribution generation, please describe what steps the Department should take to remove these barriers. As part of this response, please discuss whether the Department should establish uniform technical interconnection standards and procedures for distributed generation.
   b. Please comment on whether the Department should adopt the IEEE's uniform technical interconnection standards, or the uniform standards adopted by other states, for use in Massachusetts.
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   a. Please discuss the appropriate method for the calculation of standby or back-up rates associated with the installation of distributed generation. As part of this response, please discuss whether other states have established policies regarding back-up rates associated with distributed generation that may be appropriate for adoption in Massachusetts.
3. Please discuss the role of distributed generation with respect to the provision of reliable, least-cost distribution service by the Massachusetts distribution companies.
   a. What steps should the distribution companies take in order to identify areas where the installation of distribution generation would be a lower-cost alternative to system upgrades and additions?

b. What steps should the distribution companies take to encourage the installation of cost-effective distributed generation in their service territories?

4. What other issues are appropriate for consideration as part of the Department's investigation of distributed generation?

Initial comments should be filed by **August 1, 2002.** Reply comments should be filed by **August 15, 2002**. A public hearing regarding distributed generation will be held at the Department's offices at 10:00 a.m. on **August 21, 2002.** After the public hearing, the Department will determine what further proceedings may be appropriate.

All comments exceeding 20 pages in length must contain an executive summary. One original and ten copies of all comments should be filed with Mary Cottrell, Secretary, Department of Telecommunications and Energy, One South Station - 2nd Floor, Boston, Massachusetts 02110. All written comments also should be submitted to the Department in electronic format. Electronic submissions should be made using one of the following methods: (1) by e-mail attachment to dte.efiling@state.ma.us and william.stevens@state.ma.us and or (2) on a 3.5" disk, IBM-compatible format. The text of the e-mail or the disk label must specify (1) the docket number of the proceeding (D.T.E. 02–38), (2) name of the person or company submitting the filing, and (3) a brief descriptive title of the document. The electronic filing should also include the name, title and phone number of a person to contact in the event of questions about the filing. Text responses should be written in either Word Perfect (naming the document with a ".wpd" suffix), in Microsoft Word (naming the document with a ".doc" suffix), or as an Adobe PDF file (naming the document with a ".pdf" suffix). Data or spreadsheet responses should be compatible with Microsoft Excel. All written pleadings or comments submitted in electronic format will be posted on the Department's website, http://www.mass.gov/dpu.

Any person desiring further information regarding this notice should contact William H. Stevens, Jr., Hearing Officer, Department of Telecommunications and Energy, at (617) 305-3620.